

# **Bad Rock Canyon Wildlife Management Area Region 1**



## **Wildlife Habitat Land Project Proposal June 2020**

**Prepared by:  
Kris Tempel**



## WILDLIFE HABITAT LAND PROJECT PROPOSAL

1. **Region:** 1 **Regional Supervisor:** Jim Williams

**Name of Applicants:** Kris Tempel (Region 1 Habitat Conservation Biologist), Alan Wood (Wildlife Science Program Supervisor), Neil Anderson (Region 1 Wildlife Manager)

2. **Date:** June 2, 2020

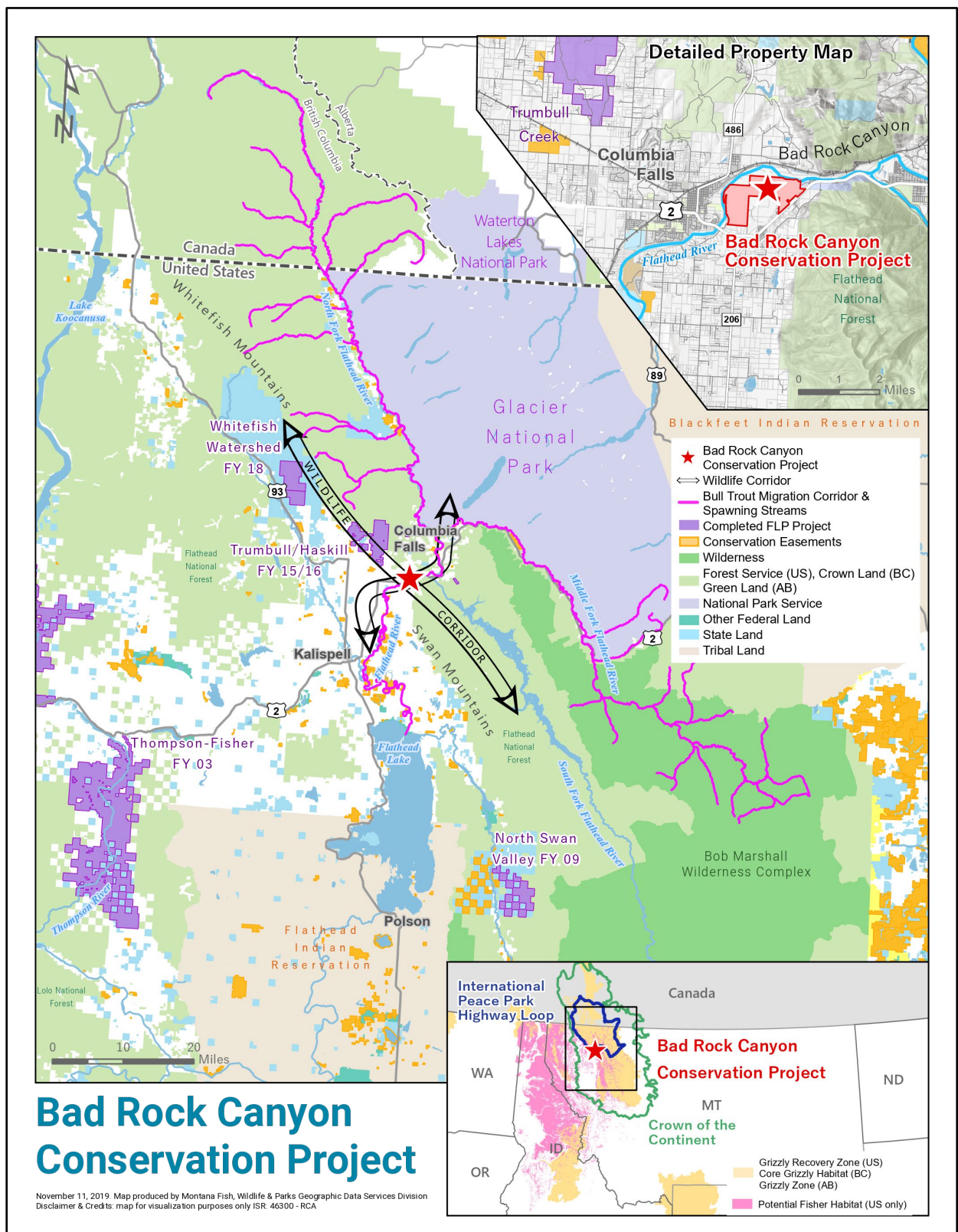
3. **Project Name:** Bad Rock Canyon Wildlife Management Area  
**Type of Project:** Fee Title

4. **Size:** 800 acres

5. **Location:** Less than 1 mile east of Columbia Falls, Flathead County, Region 1

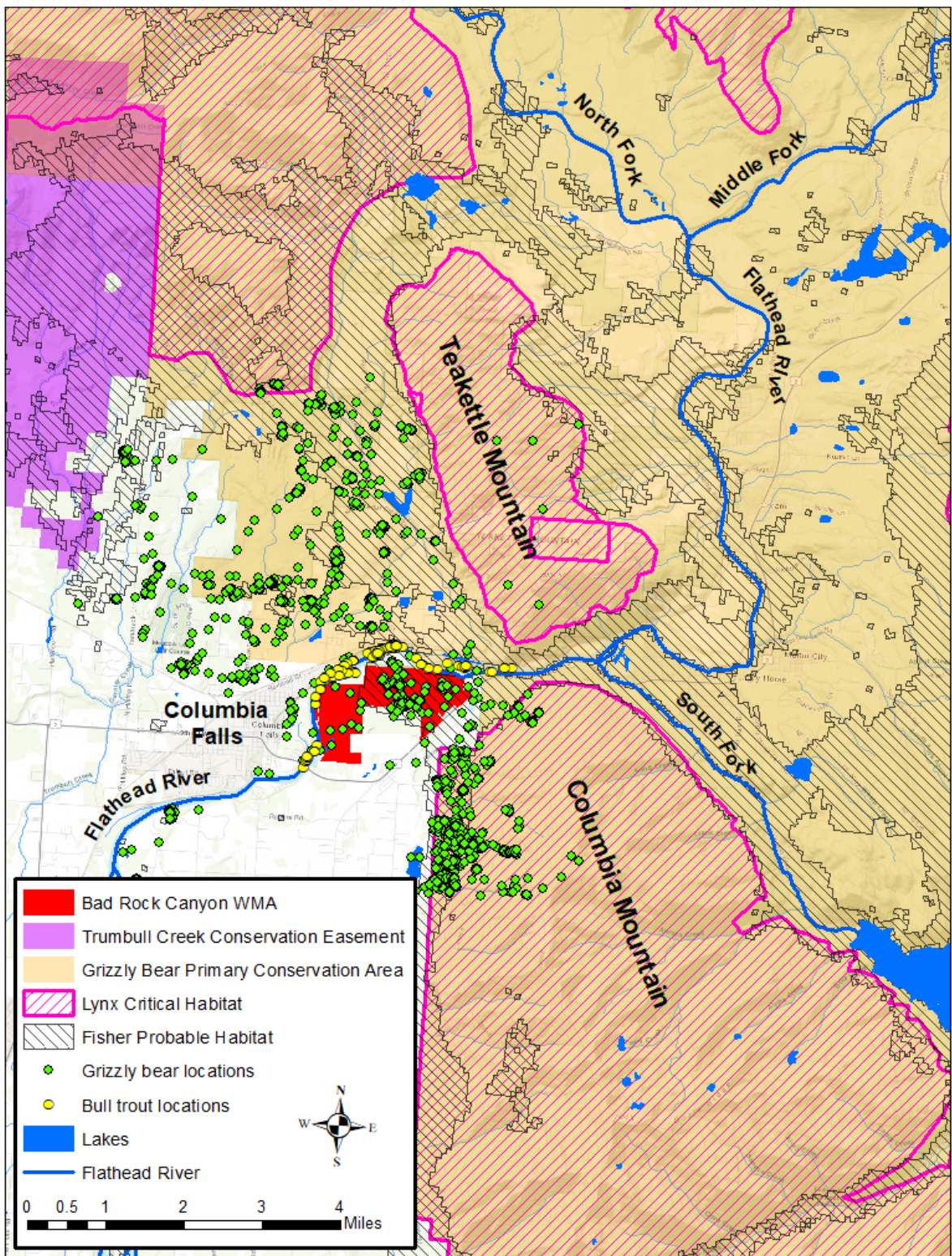
6. **Map:** See Figure 1 (p. 2)

7. **Project Need:** FWP and the Flathead Land Trust are collaborating to conserve 800 acres of forest along 1.6 miles of the Flathead River near Columbia Falls to protect water quality and important fish and wildlife habitat, while providing free public recreation access (Fig. 1). The property is highly developable and threatened by the rapidly growing city of Columbia Falls, but would be protected as a WMA under this proposal. The property currently provides an excellent opportunity for youth and disabled hunters to harvest elk and white-tailed deer just minutes from Columbia Falls, an opportunity unavailable elsewhere in Montana, and which would be lost if this property were developed. This project safeguards vital habitat and a travel corridor for bull trout and grizzly bears, ESA-listed species found on the property (Figs. 1 & 2). This key corridor is located at a geographic pinch point where the Flathead River flows through a narrow canyon between two mountain ranges (Fig. 2). A trail is currently being constructed on the property through a revocable license issued by the landowner to allow access for hikers, bikers, birdwatchers, and others. Under FWP ownership, public access could be managed to preserve wildlife presence and hunting opportunities while allowing compatible trail and property use. The project is adjacent to a stronghold of public lands and adds to a 12,000-acre network of conserved land along a 43-mile reach of the Flathead River between Columbia Falls and Flathead Lake. It meets all three goals for Habitat Montana by: 1) conserving habitat for wildlife populations and maintaining the current unique hunting opportunity, 2) adding to a larger landscape of protected properties and federally owned lands, and 3) allowing FWP to manage this property in a way that balances the needs of the recreating public with fish and wildlife habitat values.



**Figure 1.** The Bad Rock Canyon Wildlife Management Area project location and importance as a wildlife and fish movement corridor.





**Figure 2.** Map showing bull trout and grizzly bear use of the project property as well as its linkage between the Whitefish Range (Teakettle Mountain) and the Swan Range (Columbia Mountain).



## **8. Statewide Habitat Criteria**

The property consists of 100% Tier I terrestrial community types: 45% floodplain/riparian, 20% conifer-dominated forest and woodland (xeric-mesic), 10% montane grassland, 5% conifer-dominated forest and woodland (mesic-wet), and 2% deciduous shrubland. The property has approximately 1.6 miles of bull trout habitat along the Flathead River, as well as a pristine riparian cottonwood forest, 1.0 mile of spring creek habitat, and over 200 acres of wetlands. This section of the Flathead River flowing along the property has been shown through radio telemetry work to be important bull trout rearing and overwintering habitat as well as a migration corridor between Flathead Lake and tributaries in the North and Middle forks of the Flathead River (Fig. 2). There is no cropland on the property.

## **9. Project-Level Strategic Criteria**

### **a) Site-Specific Habitat Values**

The project lands provide key habitat for 43 Species of Greatest Conservation Need as identified in Montana's 2015 State Wildlife Action Plan; including, but not limited to, wolverine, westslope cutthroat trout, great blue heron, Lewis's woodpecker, western toad, and little brown myotis. Being undeveloped, the open lowlands of this project area still provide a safe crossing area for grizzly bears, black bears, mountain lions, wolverine and other wide-ranging carnivores that move north and south between the Whitefish and Swan mountain ranges (Fig. 1). One hundred percent of the property is big game winter range for elk, moose, and white-tailed deer. FWP radio collar data show at least six grizzly bears have used this area for foraging and as a travel corridor between the Whitefish and Swan mountains (Fig. 2). This property buffers the river and supports nesting bald eagles and osprey, great blue herons, a herd of elk, hundreds of white-tailed deer as well as beaver, mink, and river otter. The property's wetlands, forested riparian habitat, and spring creek protect the healthy function and excellent water quality of Flathead River which flows from Glacier National Park and the Bob Marshall Wilderness into Flathead Lake. This is the largest block of privately-owned riparian habitat along the Flathead River and the property's cottonwood gallery forest is a rare community type in northwestern Montana, especially along this dam-influenced section of the Flathead River above Flathead Lake (Fig. 3). Cottonwood forests are in decline yet provide habitat for more than half the bird species in Montana. In the western U.S., they support a higher diversity of breeding birds than all other western habitats combined. Groundwater is less than 8 feet below the surface, so conservation of this area would protect natural filters and vulnerable groundwater important to maintaining the excellent water quality in Flathead River and Lake. The project protects one mile of a warm spring creek which provides important

waterfowl habitat in winter and spring when other areas are ice-covered (Fig. 4). The Flathead Valley is a key migratory stopover in the Intermountain West portion of the Pacific Flyway used by hundreds of thousands of waterfowl annually. The entire population of Flathead Lake bull trout use habitat along the property when migrating to upstream spawning grounds, some as far as 150 miles from Flathead Lake into Canada (Fig. 1). FWP radio tag data document bull trout using the project's side channel habitat year-round (Fig. 2). Fifty percent of the property is designated as high value, potential fisher habitat, a rare Montana species of concern. The project is part of a larger network of protected lands in Montana, Idaho, and Washington that have secured habitat for this species and kept it from being listed under the ESA. The 10% of the property that consists of montane grassland is a rare, native habitat in northwestern Montana.



**Figure 3.** *A large, healthy cottonwood forest exists on the property (photo by Laura Katzman).*





**Figure 4.** *A spring channel runs through the property and provides bird habitat, especially when other areas are frozen over in winter (photo by Laura Katzman).*

#### **b) Threat Status**

The threat status of this project is imminent. The Columbia Falls Aluminum Co. (CFAC), a subsidiary of Glencore, a multi-national company, has decided to dispose of this property. CFAC has given FWP and the Flathead Land Trust a two-year window to raise the funding to complete this project, and if the fundraising is unsuccessful, the company has made it clear they will place the property on the open market. If this project fails, the property will most likely be quickly sold, subdivided, and developed into a high-density neighborhood which will include highly sought-after riverfront lots. This 800-acre property could be subdivided into much smaller parcels as half the property is zoned for 10-acre lots and the other half is un-zoned; resulting in a minimum of 43 additional residences. A 55-acre property immediately south of this project was recently approved for 78 residences. Development around the project area is booming and land values are soaring (Fig. 5). From 2000 to 2010, Flathead County had 38% of its open space converted to residential development. Since 2011, the median home price in Columbia Falls has jumped from \$100,000 to \$309,500, a 300% increase. From 1990 to 2016, Flathead County experienced a 65% increase in population size while the city of Columbia Falls grew by 82%. Over the past year, the county's population

increased 2.4% and average home prices increased 10%. In 2018, the real estate market had an all-time high number of sales. Since January 2015, there have been 5,820 acres sold throughout Flathead County for new residential development. As of 2019, three of the ten fastest growing cities in Montana were located in Flathead County: Columbia Falls, Whitefish, and Kalispell. The property is highly developable, adjacent to Columbia Falls, and has superb development attributes; including level to gently rolling terrain, waterfront, stunning views, and a remote feel only minutes away from access to towns, shopping, and commercial transportation. The project area is easily accessible off US Highway 2 and only two minutes from downtown Columbia Falls, 10 minutes from Glacier Park International Airport, 25 minutes from Kalispell, and 20 minutes from Glacier National Park. Access to gas and electrical service is right at the property's borders. Residential development of this property would require individual septic systems and wells (or a community well system) as Columbia Falls has not expanded city services to this area. Expansion is unlikely in the near future as it requires bringing lines under the Flathead River and would be extremely expensive. Development of this 800-acre property could have significant impacts to the water quality of the Flathead River and the associated shallow ground water.



**Figure 5.** *Columbia Falls with the project area across the river in the background (photo by Gravityshots).*

### c) **Focal Priority**

One hundred percent of this property is in the Whitefish Stillwater Tier I Terrestrial Focal Area. The entire property is also within the Flathead Tier I Other Priority Aquatic Focal Area. The project lands are part of a buffer area



that was identified in the USFWS 2018 Conservation Strategy for the Grizzly Bear in the Northern Continental Divide Ecosystem as vital habitat for female bears and necessary to sustain a recovered population within the federally-designated recovery area. This project would protect important migratory bird habitat and intermountain valley floor wetland habitat identified as important in the Intermountain West Joint Venture Implementation Plan and three national priority bird conservation plans (the North American Waterfowl Management Plan, the North American Waterbird Conservation Plan, and the Partners in Flight Land Bird Conservation Plan). Other initiatives have identified this property as a high conservation priority, including the Western Governors Association Initiative on Wildlife Corridors and Crucial Habitat, the Yellowstone-to-Yukon Conservation Initiative, National Fish and Wildlife Foundation's Grizzly Bear and Northern Rockies Wildlife Corridors Keystone Initiative, and the Heart of the Rockies Conservation Initiative. The project builds on the success of three nearby Forest Legacy Program-funded projects: the 10,218-acre Whitefish Lake Watershed Project, the 3,020-acre Haskill Basin conservation easement, and the 7,150-acre Trumbull Creek conservation easement. This project ranked #5 of 46 projects nationally for the FY2021 Forest Legacy Program and was awarded \$4 million in funding. The 2017 Flathead-Stillwater Watershed Restoration Plan describes the water quality issues in lakes, rivers, and streams of the Flathead-Stillwater watershed. The Flathead River along this property is listed as a stream of concern due to the risk of pollutants entering the waterway. This project precludes development and protects the river from septic leachate, lawn chemicals, and pavement runoff. Conservation of this area would add to the successes of the Flathead River to Lake Initiative (R2L), a group of landowners, conservation organizations, state, federal, and tribal partners working to conserve and restore the natural heritage of Flathead River and Lake, which includes excellent water quality, outstanding scenic and recreation values, abundant fish and wildlife and prime farmland. Completion of this project will add 800 acres to a larger network of R2L-conserved land totaling 12,000 acres along the 43-mile stretch of the Flathead River flowing through the heart of the Flathead Valley. Though the property is not within a Grassland Initiative priority county, it does consist of 10% montane grassland which is rare for northwest Montana. This property is a natural wildlife movement corridor for animals moving between the Whitefish and Swan mountain ranges as well as from forest habitat on the Flathead National Forest down into the Flathead Valley (Figs. 1, 2 & 6). The property is also part of a migratory corridor for adult bull trout that rest along this property as they move upstream each fall from Flathead Lake to the Middle and North forks of the Flathead River to spawn, with some traveling as far as 150 miles into Canada (Figs. 1 & 2). Juvenile bull trout use this same resting habitat along the property as they migrate in reverse to rear in Flathead Lake.



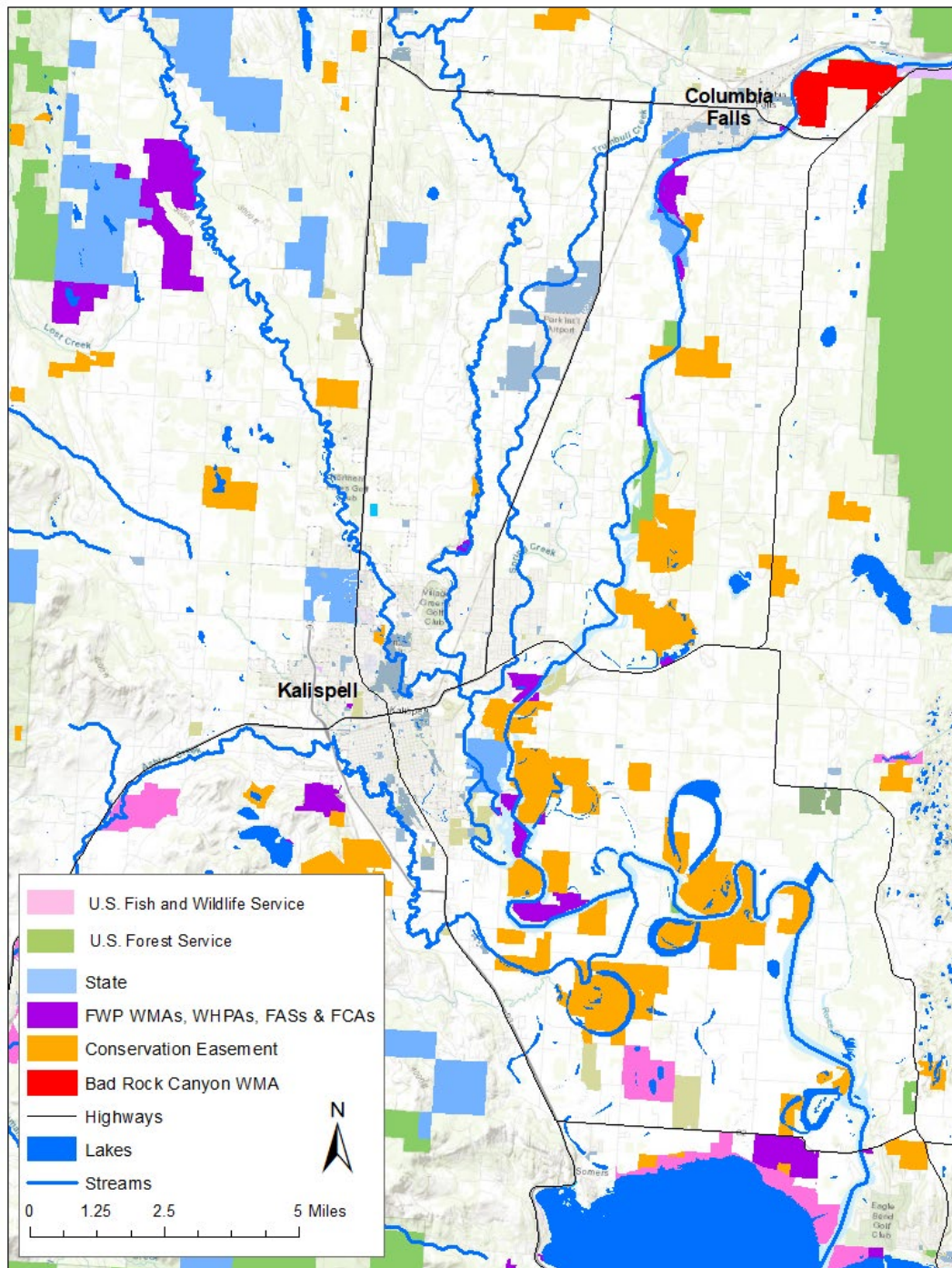
**Figure 6.** *The property provides connectivity from the Flathead Valley to the Flathead National Forest and to Glacier National Park (photo by Gravityshots).*

#### **d) Geographic Effectiveness**

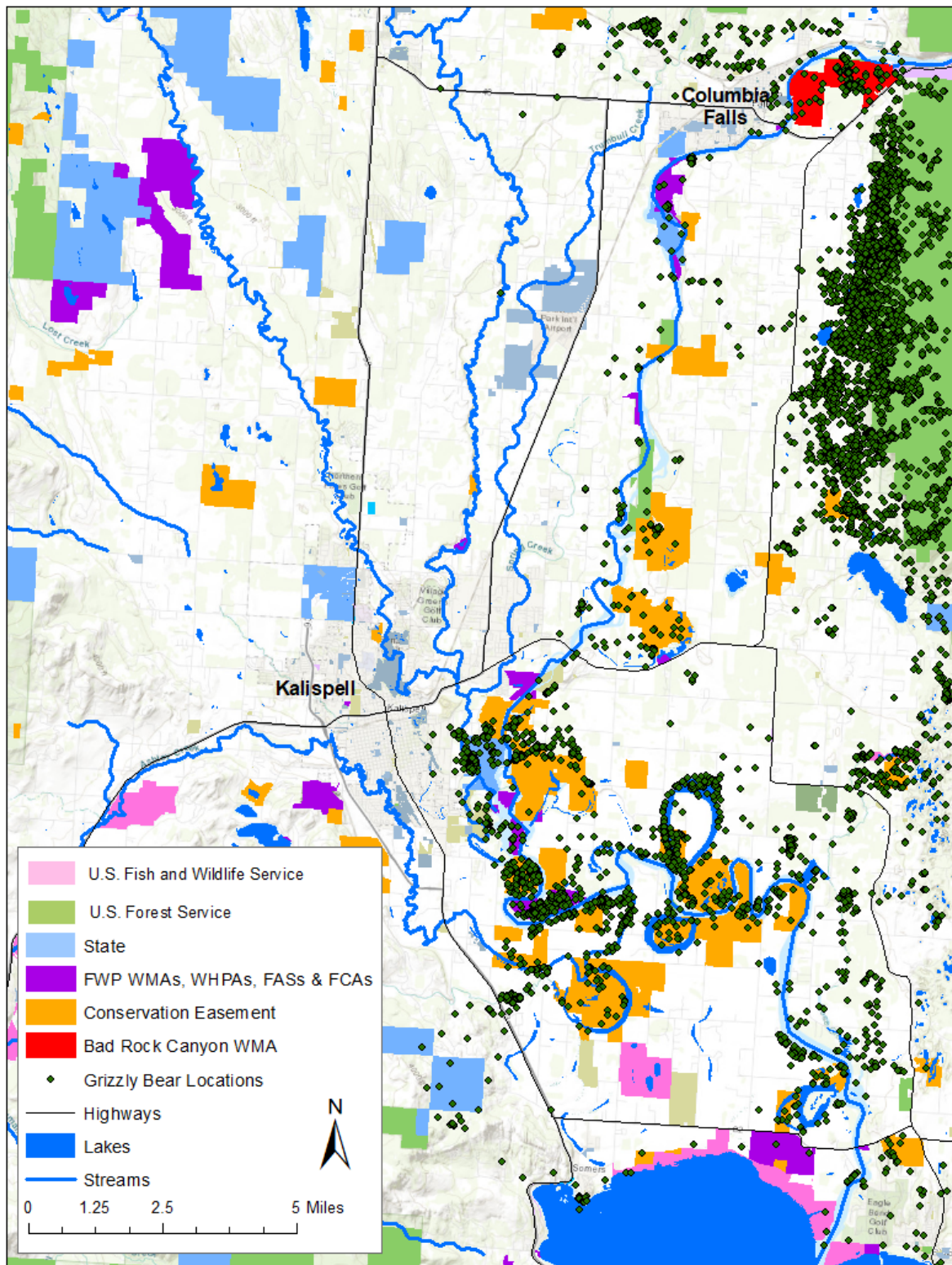
This 800-acre property has critical low elevation habitat adjacent to a stronghold of public lands including Flathead National Forest, Glacier National Park, and the Bob Marshall Wilderness complex in the Crown of the Continent Ecosystem (Figs. 1 & 6). This project is also in close proximity to the Trumbull Creek and Haskill Basin conservation easements and the Whitefish Lake Watershed Project which together protect over 20,000 acres. The project's shallow ground water, wetlands, and adjacency to the Flathead River provides for moist, productive, low elevation riparian habitat needed by wildlife struggling to adapt to a warmer, drier climate. As mentioned above, completion of this project will add 800 acres to a larger network of River to Lake Initiative-conserved land totaling 12,000 acres along 43 miles of the Flathead River between Columbia Falls and Flathead Lake (Fig. 7). The R2L Initiative has helped conserve 53% of the wetlands, 50% of the high-quality riparian areas, 45% of the shallow groundwater, and 42% of the 100-year floodplain in this focus area. This property adds to this conservation with its significant amount of wetlands, riparian areas, and shallow groundwater. The Flathead River corridor, including the project area, is heavily used by grizzly bears throughout the year, and especially in the fall when berries and fruit trees ripen (Fig. 8). Conservation of this corridor allows bears to better navigate the heavily developed Flathead Valley during years of poor



huckleberry production, reducing conflict with human residents. The protected properties along the river and this proposed WMA provide habitat and a connectivity corridor for grizzly bears and other wildlife living and moving between the Flathead Valley and the surrounding forestland.



**Figure 7.** The River to Lake Initiative area showing the conservation accomplishments including areas owned and managed by FWP (Wildlife Management Areas, Wildlife Habitat Protection Areas, Fishing Access Sites, and Fisheries Conservation Areas).



**Figure 8.** The River to Lake Initiative area showing conservation easements, FWP fee title properties, and areas used by radio collared grizzly bears over the last decade.



**e) Contribute to hunting and fishing opportunity and other recreation**

The property is in Block Management and currently provides an excellent opportunity for youth and disabled hunters to harvest elk and white-tailed deer just minutes from Columbia Falls, an opportunity unavailable elsewhere in Montana that could continue under state ownership (Fig. 9). Access to this property is highly coveted and all available days during the hunting season see a party of hunters on the property. The property generates approximately \$7,000/year in direct expenditures to the local economy through this limited hunting opportunity. The Flathead River along the project property is used by 5,000 boaters and anglers/year. Angler use alone represents roughly \$750,000/year in local economic activity. This project will allow other compatible public uses that will provide additional economic benefits for the local community.



**Figure 9.** *Young elk hunter investigating grizzly bear tracks on the property (photo by Franz Ingelfinger).*

#### f) Management Considerations

The habitat on this property is in good condition and not in need of restoration so there are no immediate management concerns. CFAC has done an excellent job of managing this property as open space for decades, there are no structures located on it and weed issues are minimal. The forest is in good health and the trees are well spaced, so there is no immediate need for forest management (Figs. 10 & 11). A small parking area has been created at the southwestern edge of the property for access to the trail and is situated in front of a locked gate that effectively controls motorized access. This property is directly upstream of the Teakettle Fishing Access Site (FAS), and numerous Wildlife Management Areas (WMAs), Wildlife Habitat Protection Areas (WHPAs), and Fisheries Conservation Areas (FCAs) are also located in this section of the Flathead River between Columbia Falls and Flathead Lake (Fig. 7). Habitat management requirements would be minimal and similar to the existing twelve parcels of FWP property downstream of this property. Management of public recreation use will be the biggest challenge for the property, but Region One has excellent law enforcement coverage with FWP wardens based in two adjacent communities, Columbia Falls and Hungry Horse. Taxes for this property were \$1,068.43 for tax year 2018-2019.



**Figure 10.** Aerial view of a portion of the property's riparian, forest, and grassland habitat.





**Figure 11.** *The property's healthy tree and shrub habitat.*